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(FILE 'HOME' ENTERED AT 16:19:45 ON 09 JUN 2003)

FILE 'REGISTRY' ENTERED AT 16:19:55 ON 09 JUN 2003

L1 STR  
L2 0 S L1  
L3 STR L1  
L4 0 S L3

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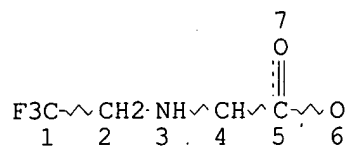
*8 comp da -*

FILE 'HCAPLUS' ENTERED AT 16:22:47 ON 09 JUN 2003

~~L6 8 S L3 FULL~~

=> d que stat 16

L3 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L5 8 SEA FILE=REGISTRY SSS FUL L3

L6 3 SEA FILE=HCAPLUS ABB=ON L5

=> d 16 ibib abs hitstr 1-3

L6 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:869010 HCAPLUS

DOCUMENT NUMBER: 135:372002

TITLE: Preparation of perfluoroalkyl amino acid derivatives as anticancer agents

INVENTOR(S): Desmarteau, Darryl; Montanari, Vittorio

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 20 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001046960	A1	20011129	US 2001-817507	20010326
PRIORITY APPLN. INFO.:			US 2000-195342P	P 20000405
OTHER SOURCE(S): CASREACT 135:372002; MARPAT 135:372002				

AB Fluorinated amino acids CF<sub>3</sub>CH<sub>2</sub>NHCHR<sub>1</sub>CO<sub>2</sub>R<sub>2</sub> (R<sub>1</sub>, R<sub>2</sub> are H, alkyl, aryl, arom. compds., amines, sulfur-contg. alkyl or aryl groups, and heterocyclic compds.) were prepd. and reacted with other amino acids to form peptides. Thus, treatment of L-phenylalanine tert-Bu ester with CF<sub>3</sub>CH<sub>2</sub>I(Ph)N(SO<sub>2</sub>CF<sub>3</sub>)<sub>2</sub> and acidic ester cleavage afforded CF<sub>3</sub>CH<sub>2</sub>-L-Phe-OH, which underwent coupling with L-isoleucine tert-Bu ester to give CF<sub>3</sub>CH<sub>2</sub>-L-Phe-L-Ile-OBu. Various synthesized trifluoroethyl dipeptides are believed to show anticancer activity (CF<sub>3</sub>CH<sub>2</sub>-L-Tyr-L-Ile-OBu was tested).

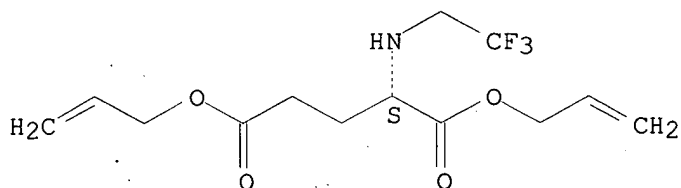
IT 374107-94-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of perfluoroalkyl amino acid derivs. as anticancer agents)

RN 374107-94-5 HCAPLUS

CN L-Glutamic acid, N-(2,2,2-trifluoroethyl)-, di-2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



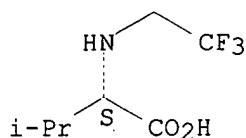
IT 271592-91-7 303049-62-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of perfluoroalkyl amino acid derivs. as anticancer agents)

RN 271592-91-7 HCAPLUS

CN L-Valine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

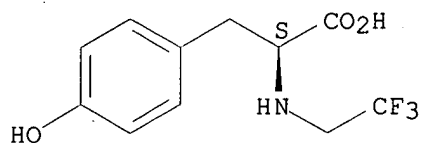
Absolute stereochemistry.



RN 303049-62-9 HCAPLUS

CN L-Tyrosine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



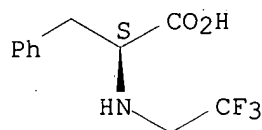
IT 303049-61-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of perfluoroalkyl amino acid derivs. as anticancer agents)

RN 303049-61-8 HCAPLUS

CN L-Phenylalanine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L6 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:651071 HCAPLUS

DOCUMENT NUMBER: 133:322121

TITLE: Easy preparation of bioactive peptides from the novel N.alpha.-trifluoroethyl amino acids

AUTHOR(S): DesMarteau, Darryl D.; Montanari, Vittorio

CORPORATE SOURCE: Department of Chemistry, Clemson University, Clemson, SC, 29634-0973, USA

SOURCE: Chemistry Letters (2000), (9), 1052-1053

CODEN: CMLTAG; ISSN: 0366-7022

PUBLISHER: Chemical Society of Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:322121

AB N.alpha.-Trifluoroethyl amino acids have been prepd. for the first time and unexpectedly found to behave as conventionally N-protected amino acids. Novel unnatural peptides are easily prepd. in high yields without racemization. The obsd. chem. results from steric factors as well as from the acidity of the CF<sub>3</sub>CH<sub>2</sub>NH group, according to comparative expts. Of ten dipeptides that were tested for antitumor activity, CF<sub>3</sub>CH<sub>2</sub>-L-Tyr-L-Ile-OtBu was the most active.

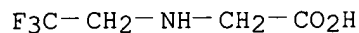
IT 303049-67-4

RL: PRP (Properties)

(prepn. of peptides from N.alpha.-trifluoroethyl amino acids as  
antitumor agents)

RN 303049-67-4 HCAPLUS

CN Glycine, N-(2,2,2-trifluoroethyl)-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

IT 271592-91-7P 303049-60-7P 303049-61-8P  
303049-62-9P

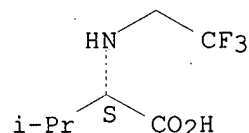
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(prepn. of peptides from N.alpha.-trifluoroethyl amino acids as  
antitumor agents)

RN 271592-91-7 HCAPLUS

CN L-Valine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

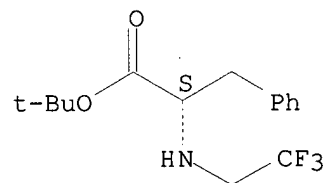
Absolute stereochemistry.



RN 303049-60-7 HCAPLUS

CN L-Phenylalanine, N-(2,2,2-trifluoroethyl)-, 1,1-dimethylethyl ester (9CI)  
(CA INDEX NAME)

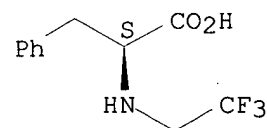
Absolute stereochemistry.



RN 303049-61-8 HCAPLUS

CN L-Phenylalanine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

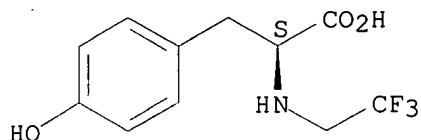
Absolute stereochemistry.



RN 303049-62-9 HCAPLUS

CN L-Tyrosine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:165601 HCAPLUS

DOCUMENT NUMBER: 133:4915

TITLE: A discovery tool at work: the unexpected properties of a two-carbon residue

AUTHOR(S): Desmarteau, Darryl D.; Montanari, Vittorio

CORPORATE SOURCE: Department of Chemistry, Clemson University, Clemson, SC, 29634-1905, USA

SOURCE: Fluorinated Bioactive Compounds in the Agricultural & Medical Fields, Proceedings of the Conference, Brussels, Sept. 13-15, 1999 (1999), 19/1-19/13. Chemical & Polymer: Hemel Hempstead, UK. CODEN: 68SGA2

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The prepn. of novel peptides as represented by  $\text{CF}_3\text{CH}_2\text{-L-Phe-L-Ile-OCMe}_3$ , a prospective antitumor compd., is reported. These peptides are directly obtained via std. chem. from Na-trifluoroethyl amino acids. In fact, unexpectedly, the N.alpha.-1,1,1-trifluoroethyl substitution completely deactivates the .alpha.-nitrogen. That is, Na-trifluoroethyl amino acids behave exactly like Na-protected amino acids, and take part in std. peptide synthesis accordingly. Representative Na-trifluoroethyl amino acids are prepd. by reaction of com. amino acid t-Bu esters with 1 equiv  $\text{CF}_3\text{CH}_2\text{I(Ph)N(SO}_2\text{CF}_3)_2$  in dichloromethane-water at 22.degree.C in 1 h or less. The reaction is promoted by  $\text{NaHCO}_3$  (1.5 equiv). The intermediate N.alpha.-1,1,1-trifluoroethyl t-Bu esters are hydrolyzed and sepd. from coproducts at the same time by treatment with aq. HCl at 22.degree.C. Evapn. of the acid exts. provides anal. pure Na-trifluoroethyl amino acids in 78-98% yields.

IT 271592-89-3P 271592-90-6P 271592-91-7P

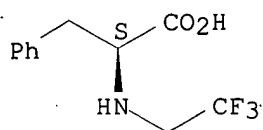
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of Na-trifluoroethyl amino acids and their use in peptide synthesis)

RN 271592-89-3 HCAPLUS

CN L-Phenylalanine, N-(2,2,2-trifluoroethyl)-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

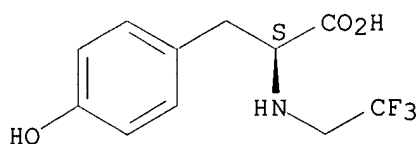


● HCl

RN 271592-90-6 HCAPLUS

CN L-Tyrosine, N-(2,2,2-trifluoroethyl)-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

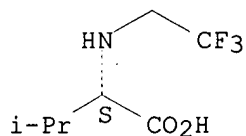


● HCl

RN 271592-91-7 HCAPLUS

CN L-Valine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

30

THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs hitstr 112 1-2

L12 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:869010 HCAPLUS

DOCUMENT NUMBER: 135:372002

TITLE: Preparation of **perfluoroalkyl** amino acid derivatives as anticancer agents

INVENTOR(S): **Desmarteau, Darryl; Montanari, Vittorio**

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 20 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001046960	A1	20011129	US 2001-817507	20010326
PRIORITY APPLN. INFO.:			US 2000-195342P	P 20000405
OTHER SOURCE(S): CASREACT 135:372002; MARPAT 135:372002				

AB Fluorinated amino acids CF<sub>3</sub>CH<sub>2</sub>NHCHR<sub>1</sub>CO<sub>2</sub>R<sub>2</sub> (R<sub>1</sub>, R<sub>2</sub> are H, alkyl, aryl, arom. compds., amines, sulfur-contg. alkyl or aryl groups, and heterocyclic compds.) were prepd. and reacted with other amino acids to form peptides. Thus, treatment of L-phenylalanine tert-Bu ester with CF<sub>3</sub>CH<sub>2</sub>I(Ph)N(SO<sub>2</sub>CF<sub>3</sub>)<sub>2</sub> and acidic ester cleavage afforded CF<sub>3</sub>CH<sub>2</sub>-L-Phe-OH, which underwent coupling with L-isoleucine tert-Bu ester to give CF<sub>3</sub>CH<sub>2</sub>-L-Phe-L-Ile-OBu. Various synthesized trifluoroethyl dipeptides are believed to show anticancer activity (CF<sub>3</sub>CH<sub>2</sub>-L-Tyr-L-Ile-OBu was tested).

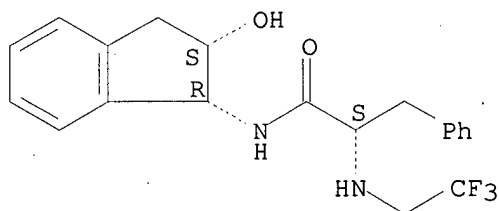
IT 271592-92-8P 271592-93-9P 271592-94-0P  
 271592-95-1P 271592-96-2P 271592-97-3P  
 271592-98-4P 271592-99-5P 271593-00-1P  
 271593-01-2P 271593-02-3P 271593-04-5P  
 271593-05-6P 374107-93-4P 374107-94-5P  
 374107-95-6P 374107-97-8P 374107-98-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of **perfluoroalkyl** amino acid derivs. as anticancer agents)

RN 271592-92-8 HCAPLUS

CN Benzenepropanamide, N-[(1R,2S)-2,3-dihydro-2-hydroxy-1H-inden-1-yl]-.alpha.-[(2,2,2-trifluoroethyl)amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



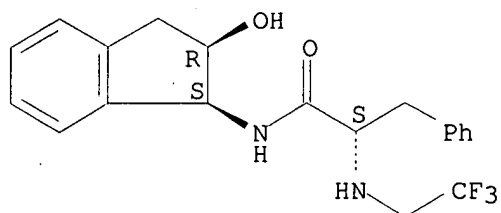
RN 271592-93-9 HCAPLUS

CN Benzenepropanamide, N-[(1S,2R)-2,3-dihydro-2-hydroxy-1H-inden-1-yl]-



.alpha.-[(2,2,2-trifluoroethyl)amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

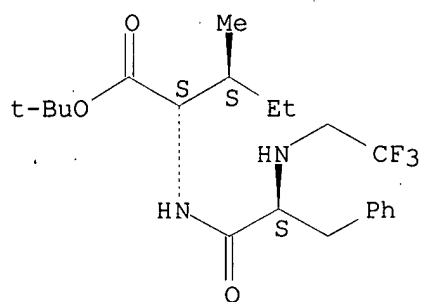
Absolute stereochemistry.



RN 271592-94-0 HCAPLUS

CN L-Isoleucine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

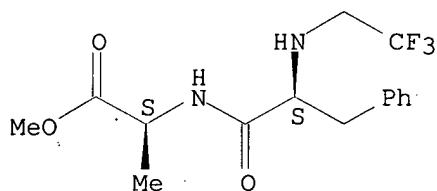
Absolute stereochemistry.



RN 271592-95-1 HCAPLUS

CN L-Alanine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, methyl ester (9CI) (CA INDEX NAME)

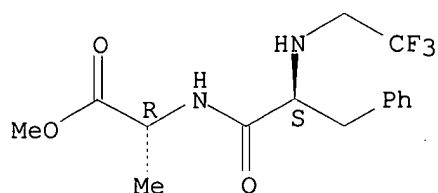
Absolute stereochemistry.



RN 271592-96-2 HCAPLUS

CN D-Alanine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, methyl ester (9CI) (CA INDEX NAME)

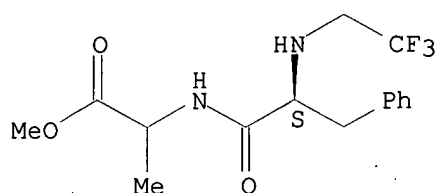
Absolute stereochemistry.



RN 271592-97-3 HCAPLUS

CN Alanine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, methyl ester (9CI) (CA INDEX NAME)

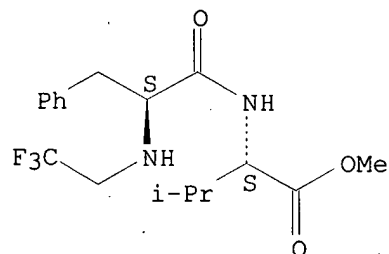
Absolute stereochemistry.



RN 271592-98-4 HCAPLUS

CN L-Valine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, methyl ester (9CI) (CA INDEX NAME)

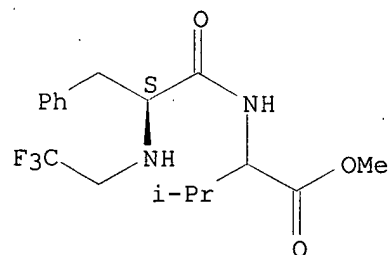
Absolute stereochemistry.



RN 271592-99-5 HCAPLUS

CN Valine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, methyl ester (9CI) (CA INDEX NAME)

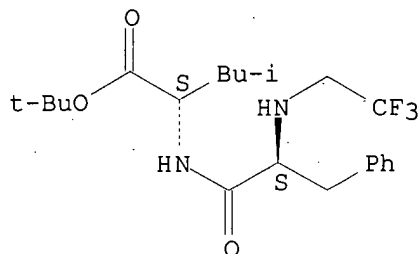
Absolute stereochemistry.



RN 271593-00-1 HCAPLUS

CN L-Leucine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

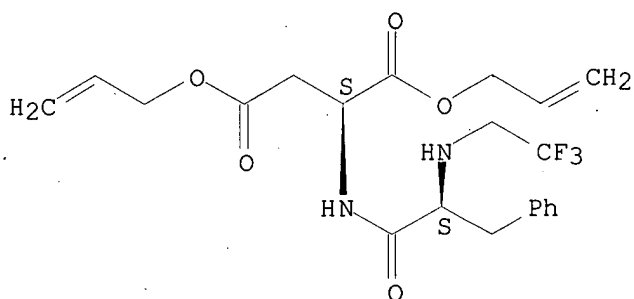
Absolute stereochemistry.



RN 271593-01-2 HCAPLUS

CN L-Aspartic acid, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, di-2-propenyl ester (9CI) (CA INDEX NAME)

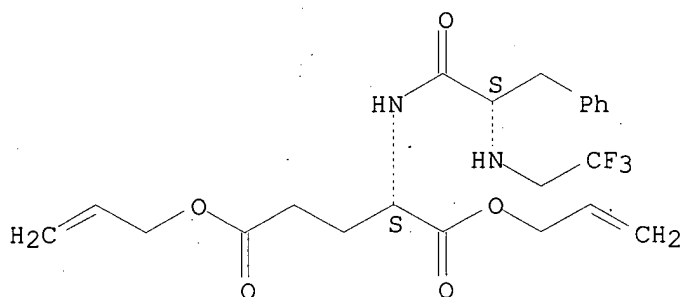
Absolute stereochemistry.



RN 271593-02-3 HCAPLUS

CN L-Glutamic acid, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, di-2-propenyl ester (9CI) (CA INDEX NAME)

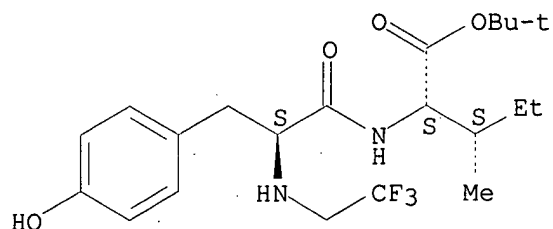
Absolute stereochemistry.



RN 271593-04-5 HCAPLUS

CN L-Isoleucine, N-(2,2,2-trifluoroethyl)-L-tyrosyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

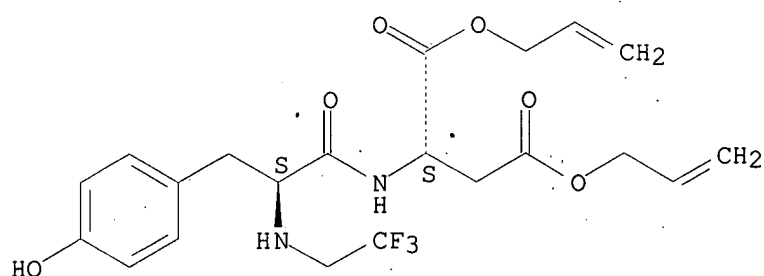
Absolute stereochemistry.



RN 271593-05-6 HCAPLUS

CN L-Aspartic acid, N-(2,2,2-trifluoroethyl)-L-tyrosyl-, di-2-propenyl ester (9CI) (CA INDEX NAME)

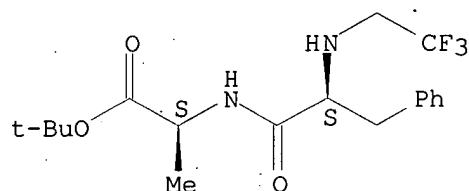
Absolute stereochemistry.



RN 374107-93-4 HCAPLUS

CN L-Alanine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

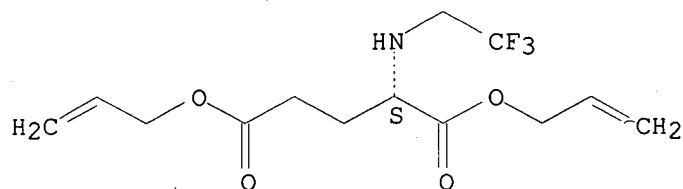
Absolute stereochemistry.



RN 374107-94-5 HCAPLUS

CN L-Glutamic acid, N-(2,2,2-trifluoroethyl)-, di-2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

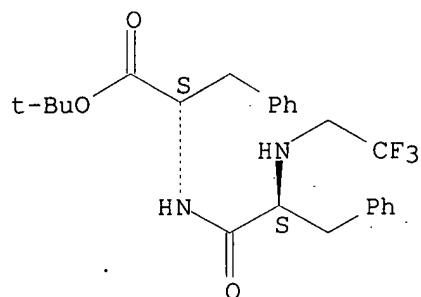


RN 374107-95-6 HCAPLUS

CN L-Phenylalanine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-,

1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

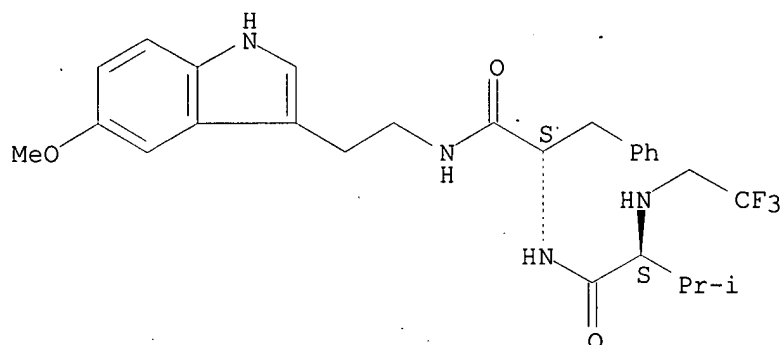
Absolute stereochemistry.



RN 374107-97-8 HCAPLUS

CN L-Phenylalaninamide, N-(2,2,2-trifluoroethyl)-L-valyl-N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)

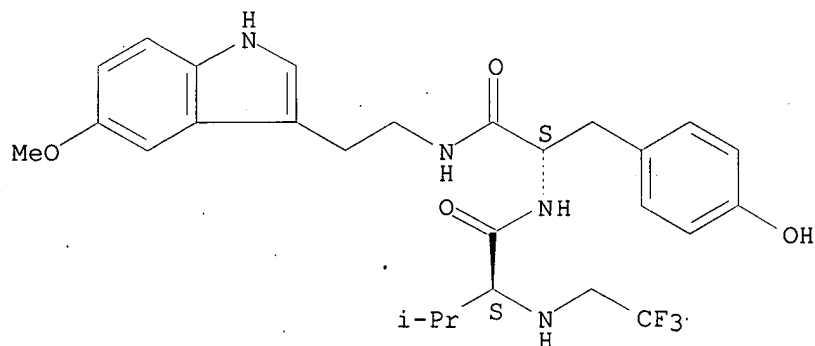
Absolute stereochemistry.



RN 374107-98-9 HCAPLUS

CN L-Tyrosinamide, N-(2,2,2-trifluoroethyl)-L-valyl-N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 71-43-2, Benzene, reactions 4070-48-8 7625-53-8  
10065-72-2 15100-75-1 16874-08-1

16874-17-2 18869-42-6 21691-50-9  
21705-13-5 22839-63-0 45172-25-6  
82113-65-3 100422-04-6 126456-43-7  
136030-00-7 271592-91-7 303049-62-9

RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of **perfluoroalkyl** amino acid derivs. as anticancer agents)

RN 71-43-2 HCAPLUS

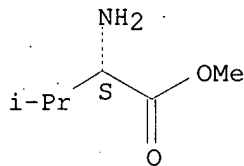
CN Benzene (8CI, 9CI) (CA INDEX NAME)



RN 4070-48-8 HCAPLUS

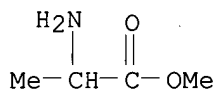
CN L-Valine, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 7625-53-8 HCAPLUS

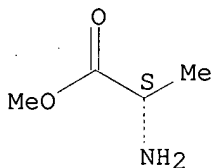
CN Alanine, methyl ester (9CI) (CA INDEX NAME)



RN 10065-72-2 HCAPLUS

CN L-Alanine, methyl ester (9CI) (CA INDEX NAME)

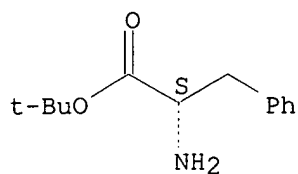
Absolute stereochemistry. Rotation (+).



RN 15100-75-1 HCAPLUS

CN L-Phenylalanine, 1,1-dimethylethyl ester, hydrochloride (9CI) (CA INDEX NAME)

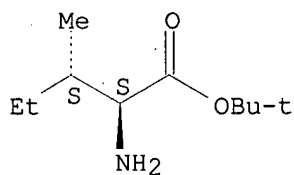
Absolute stereochemistry. Rotation (+).



● HCl

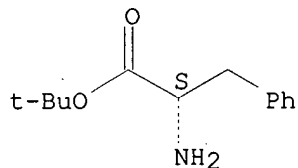
RN 16874-08-1 HCAPLUS  
CN L-Isoleucine, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

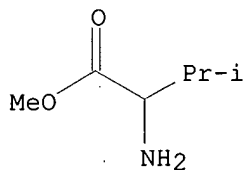


RN 16874-17-2 HCAPLUS  
CN L-Phenylalanine, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

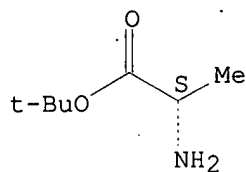


RN 18869-42-6 HCAPLUS  
CN Valine, methyl ester (9CI) (CA INDEX NAME)



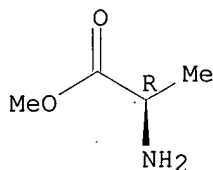
RN 21691-50-9 HCAPLUS  
CN L-Alanine, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



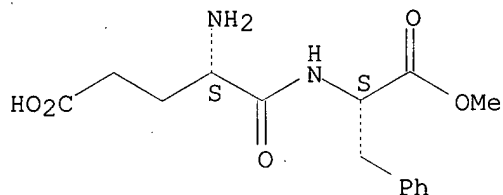
RN 21705-13-5 HCAPLUS  
 CN D-Alanine, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



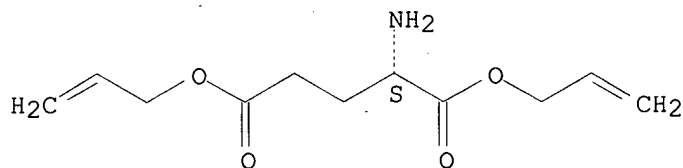
RN 22839-63-0 HCAPLUS  
 CN L-Phenylalanine, L-.alpha.-glutamyl-, 2-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



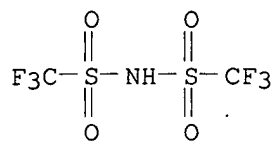
RN 45172-25-6 HCAPLUS  
 CN L-Glutamic acid, di-2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



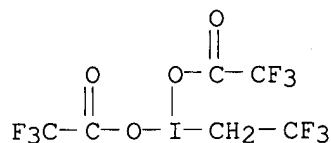
RN 82113-65-3 HCAPLUS  
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)





RN 100422-04-6 HCAPLUS

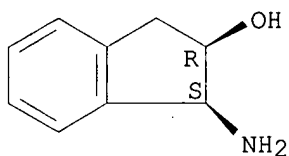
CN Iodine, bis(trifluoroacetato-.kappa.O)(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)



RN 126456-43-7 HCAPLUS

CN 1H-Inden-2-ol, 1-amino-2,3-dihydro-, (1S,2R)- (9CI) (CA INDEX NAME)

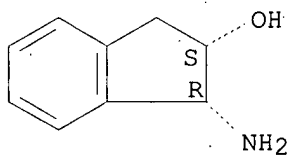
Absolute stereochemistry. Rotation (-).



RN 136030-00-7 HCAPLUS

CN 1H-Inden-2-ol, 1-amino-2,3-dihydro-, (1R,2S)- (9CI) (CA INDEX NAME)

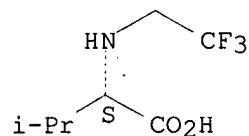
Absolute stereochemistry. Rotation (+).



RN 271592-91-7 HCAPLUS

CN L-Valine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

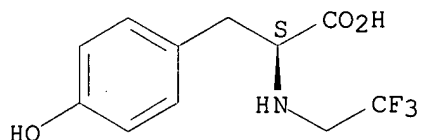
Absolute stereochemistry.



RN 303049-62-9 HCAPLUS

CN L-Tyrosine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 303049-61-8P 307501-98-0P

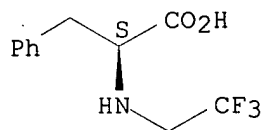
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of **perfluoroalkyl** amino acid derivs. as anticancer agents)

RN 303049-61-8 HCAPLUS

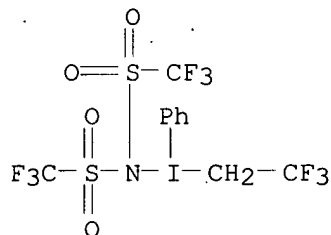
CN L-Phenylalanine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 307501-98-0 HCAPLUS

CN Iodine, phenyl(2,2,2-trifluoroethyl)[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamido-.kappa.N]- (9CI) (CA INDEX NAME)



IT 374107-96-7P

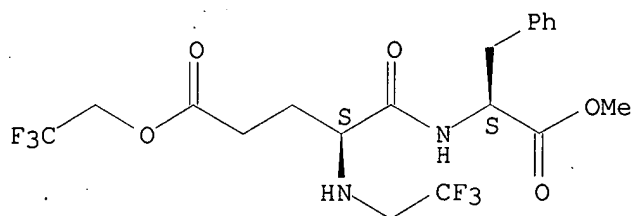
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of **perfluoroalkyl** amino acid derivs. as anticancer agents)

RN 374107-96-7 HCAPLUS

CN L-Phenylalanine, N-(2,2,2-trifluoroethyl)-L-.alpha.-glutamyl-, 2-methyl 1-(2,2,2-trifluoroethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:100304 HCAPLUS

DOCUMENT NUMBER: 123:9035

TITLE: 1-(Dichloroiodo)-1H,1H-Perfluoroalkanes

AUTHOR(S): Bravo, Pierfrancesco; Montanari, Vittorio;

Resnati, Giuseppe; DesMarteau, Darryl D.

CORPORATE SOURCE: CSSON, CNR, Milan, 20131, Italy

SOURCE: Journal of Organic Chemistry (1994), 59(20), 6093-4

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 123:9035

AB The prepn. of stable and cheap title chlorinating agents (by Cl transfer),  $\text{RfCH}_2\text{ICl}_2$  (I;  $\text{Rf} = \text{CF}_3, \text{C}_2\text{F}_5, \text{C}_3\text{F}_7, \text{H}(\text{CF}_2)_6$ ), from the corresponding  $\text{RfCH}_2\text{I}$  by direct chlorination; a similar reaction of  $\text{RfI}$  failed. I and  $\text{CF}_3\text{CO}_2\text{Ag}$  gives  $\text{RfCH}_2\text{I}(\text{O}_2\text{CCF}_3)_2$ . I are sol. in  $\text{CH}_2\text{Cl}_2$  and insol. in  $\text{CCl}_4$  or  $\text{CHCl}_3$ . The use of I as potential precursors of trivalent iodine compds. was discussed.

IT 94-02-0 110-83-8, Cyclohexene, reactions

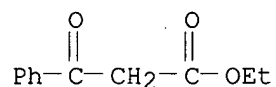
111-66-0, 1-Octene 126-81-8, Dimedone 326-06-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(chlorination with 1-(dichloroiodo)-1H,1H-perfluoroalkanes)

RN 94-02-0 HCAPLUS

CN Benzenepropanoic acid, .beta.-oxo-, ethyl ester (9CI) (CA INDEX NAME)



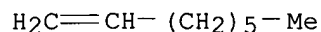
RN 110-83-8 HCAPLUS

CN Cyclohexene (8CI, 9CI) (CA INDEX NAME)

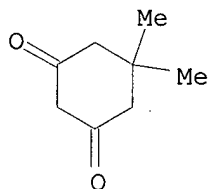


RN 111-66-0 HCAPLUS

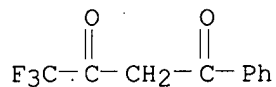
CN 1-Octene (8CI, 9CI) (CA INDEX NAME)



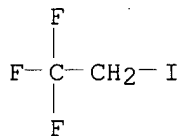
RN 126-81-8 HCAPLUS  
 CN 1,3-Cyclohexanedione, 5,5-dimethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)



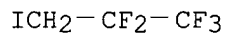
RN 326-06-7 HCAPLUS  
 CN 1,3-Butanedione, 4,4,4-trifluoro-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



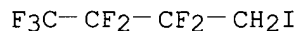
IT 353-83-3 354-69-8 374-98-1 376-32-9  
 7782-50-5, Dichlorine, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (conversion to 1-(dichloriodo)-1H,1H-perfluoroalkanes)  
 RN 353-83-3 HCAPLUS  
 CN Ethane, 1,1,1-trifluoro-2-iodo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



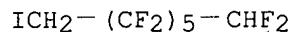
RN 354-69-8 HCAPLUS  
 CN Propane, 1,1,1,2,2-pentafluoro-3-iodo- (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 374-98-1 HCAPLUS  
 CN Butane, 1,1,1,2,2,3,3-heptafluoro-4-iodo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 376-32-9 HCAPLUS  
 CN Heptane, 1,1,2,2,3,3,4,4,5,5,6,6-dodecafluoro-7-iodo- (6CI, 8CI, 9CI) (CA INDEX NAME)

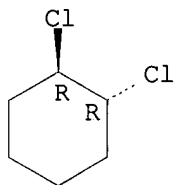


RN 7782-50-5 HCAPLUS  
 CN Chlorine (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

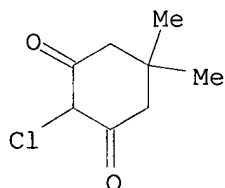
Cl-Cl

IT 822-86-6P, trans-1,2-Dichlorocyclohexane 7298-89-7P,  
 2-Chlorodimedone 21948-46-9P 41381-97-9P  
 163667-29-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (from chlorination with 1-(dichloriodo)-1H,1H-perfluoroalkanes)  
 RN 822-86-6 HCAPLUS  
 CN Cyclohexane, 1,2-dichloro-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

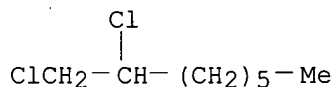
Relative stereochemistry.



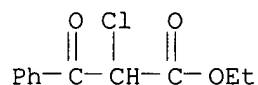
RN 7298-89-7 HCAPLUS  
 CN 1,3-Cyclohexanedione, 2-chloro-5,5-dimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



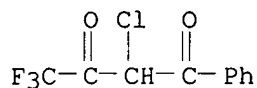
RN 21948-46-9 HCAPLUS  
 CN Octane, 1,2-dichloro- (6CI, 8CI, 9CI) (CA INDEX NAME)



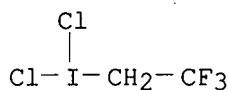
RN 41381-97-9 HCAPLUS  
 CN Benzenepropanoic acid, .alpha.-chloro-.beta.-oxo-, ethyl ester (9CI) (CA INDEX NAME)



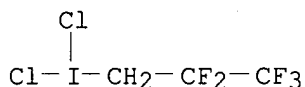
RN 163667-29-6 HCAPLUS  
 CN 1,3-Butanedione, 2-chloro-4,4,4-trifluoro-1-phenyl- (9CI) (CA INDEX NAME)



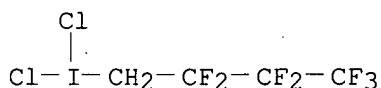
IT 159763-01-6P 163667-30-9P 163667-31-0P  
 163667-32-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (from direct chlorination of dihydroperfluoroalkyl iodides)  
 RN 159763-01-6 HCAPLUS  
 CN Iodine, dichloro(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)



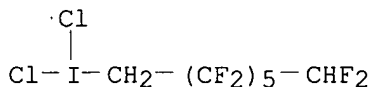
RN 163667-30-9 HCAPLUS  
 CN Iodine, dichloro(2,2,3,3,3-pentafluoropropyl)- (9CI) (CA INDEX NAME)



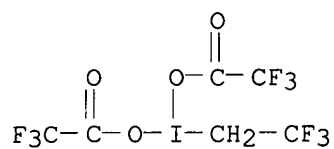
RN 163667-31-0 HCAPLUS  
 CN Iodine, dichloro(2,2,3,3,4,4,4-heptafluorobutyl)- (9CI) (CA INDEX NAME)



RN 163667-32-1 HCAPLUS  
 CN Iodine, dichloro(2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptyl)- (9CI) (CA INDEX NAME)



IT 100422-04-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (from ligand exchange with 1-(dichloroiodo)-1H,1H-perfluoroalkanes)  
 RN 100422-04-6 HCAPLUS  
 CN Iodine, bis(trifluoroacetato-.kappa.O)(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)



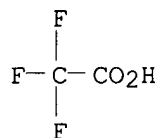
IT 2966-50-9, Silver trifluoroacetate

RL: RCT (Reactant); RACT (Reactant or reagent)

(ligand exchange with 1-(dichloroiodo)-1H,1H-perfluoroalkanes)

RN 2966-50-9 HCAPLUS

CN Acetic acid, trifluoro-, silver(1+) salt (8CI, 9CI) (CA INDEX NAME)



Ag(I)

=&gt; d ibib abs hitstr 112 1-2

L12 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:869010 HCAPLUS

DOCUMENT NUMBER: 135:372002

TITLE: Preparation of **perfluoroalkyl** amino acid derivatives as anticancer agentsINVENTOR(S): **Desmarteau, Darryl; Montanari, Vittorio**

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 20 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001046960	A1	20011129	US 2001-817507	20010326
PRIORITY APPLN. INFO.:			US 2000-195342P	P 20000405

OTHER SOURCE(S): CASREACT 135:372002; MARPAT 135:372002

AB Fluorinated amino acids CF<sub>3</sub>CH<sub>2</sub>NHCHR<sub>1</sub>CO<sub>2</sub>R<sub>2</sub> (R<sub>1</sub>, R<sub>2</sub> are H, alkyl, aryl, arom. compds., amines, sulfur-contg. alkyl or aryl groups, and heterocyclic compds.) were prep'd. and reacted with other amino acids to form peptides. Thus, treatment of L-phenylalanine tert-Bu ester with CF<sub>3</sub>CH<sub>2</sub>I(Ph)N(SO<sub>2</sub>CF<sub>3</sub>)<sub>2</sub> and acidic ester cleavage afforded CF<sub>3</sub>CH<sub>2</sub>-L-Phe-OH, which underwent coupling with L-isoleucine tert-Bu ester to give CF<sub>3</sub>CH<sub>2</sub>-L-Phe-L-Ile-OBu. Various synthesized trifluoroethyl dipeptides are believed to show anticancer activity (CF<sub>3</sub>CH<sub>2</sub>-L-Tyr-L-Ile-OBu was tested).

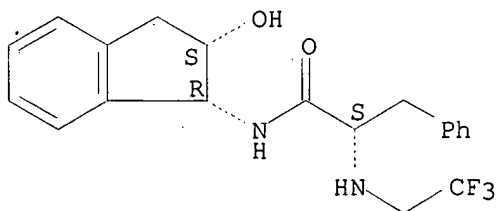
IT 271592-92-8P 271592-93-9P 271592-94-0P  
 271592-95-1P 271592-96-2P 271592-97-3P  
 271592-98-4P 271592-99-5P 271593-00-1P  
 271593-01-2P 271593-02-3P 271593-04-5P  
 271593-05-6P 374107-93-4P 374107-94-5P  
 374107-95-6P 374107-97-8P 374107-98-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of **perfluoroalkyl** amino acid derivs. as anticancer agents)

RN 271592-92-8 HCAPLUS

CN Benzenepropanamide, N-[(1R,2S)-2,3-dihydro-2-hydroxy-1H-inden-1-yl]-.alpha.-[(2,2,2-trifluoroethyl)amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



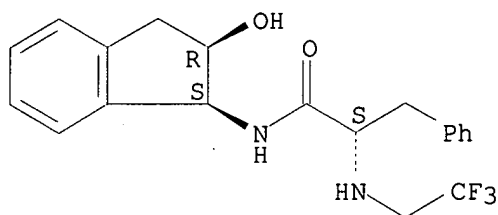
RN 271592-93-9 HCAPLUS

CN Benzenepropanamide, N-[(1S,2R)-2,3-dihydro-2-hydroxy-1H-inden-1-yl]-.



.alpha.-[(2,2,2-trifluoroethyl)amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

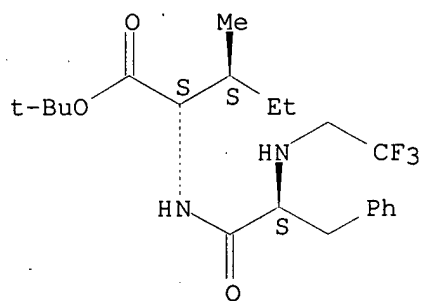
Absolute stereochemistry.



RN 271592-94-0 HCAPLUS

CN L-Isoleucine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

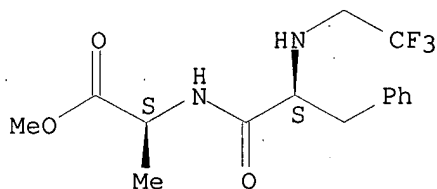
Absolute stereochemistry.



RN 271592-95-1 HCAPLUS

CN L-Alanine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, methyl ester (9CI) (CA INDEX NAME)

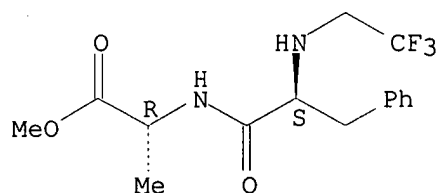
Absolute stereochemistry.



RN 271592-96-2 HCAPLUS

CN D-Alanine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, methyl ester (9CI) (CA INDEX NAME)

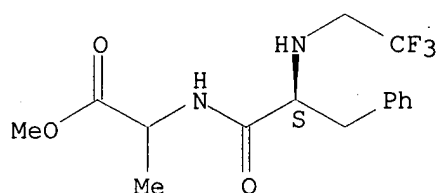
Absolute stereochemistry.



RN 271592-97-3 HCAPLUS

CN Alanine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, methyl ester (9CI) (CA INDEX NAME)

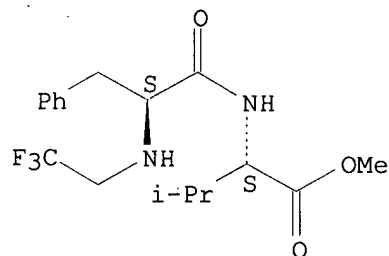
Absolute stereochemistry.



RN 271592-98-4 HCAPLUS

CN L-Valine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, methyl ester (9CI) (CA INDEX NAME)

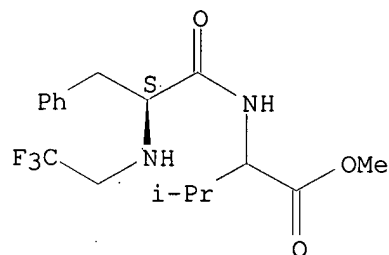
Absolute stereochemistry.



RN 271592-99-5 HCAPLUS

CN Valine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, methyl ester (9CI) (CA INDEX NAME)

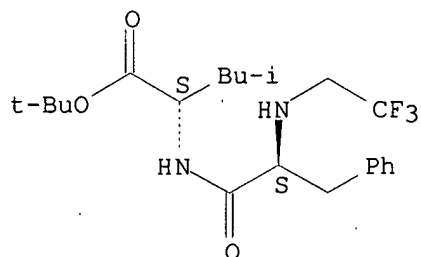
Absolute stereochemistry.



RN 271593-00-1 HCAPLUS

CN L-Leucine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

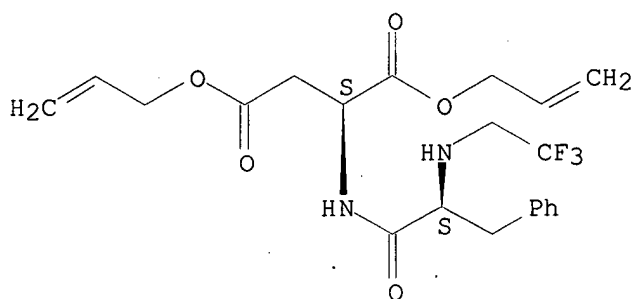
Absolute stereochemistry.



RN 271593-01-2 HCAPLUS

CN L-Aspartic acid, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, di-2-propenyl ester (9CI) (CA INDEX NAME)

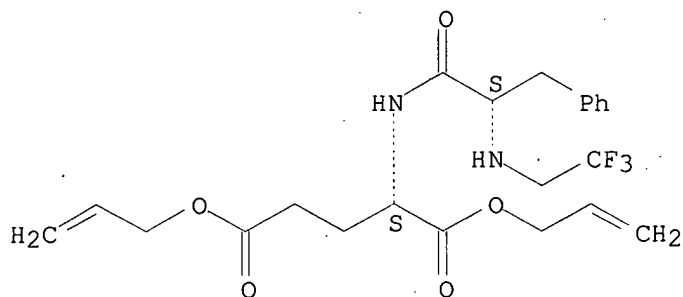
Absolute stereochemistry.



RN 271593-02-3 HCAPLUS

CN L-Glutamic acid, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, di-2-propenyl ester (9CI) (CA INDEX NAME)

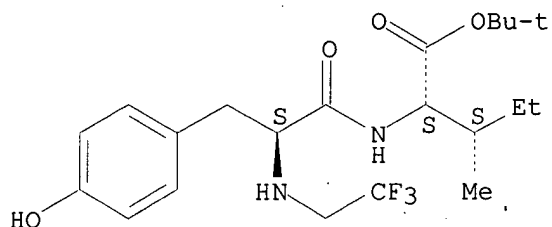
Absolute stereochemistry.



RN 271593-04-5 HCAPLUS

CN L-Isoleucine, N-(2,2,2-trifluoroethyl)-L-tyrosyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

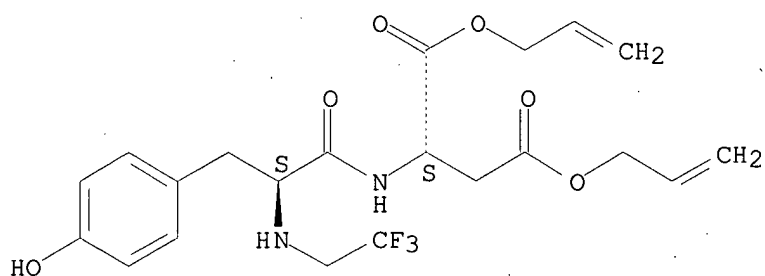
Absolute stereochemistry.



RN 271593-05-6 HCAPLUS

CN L-Aspartic acid, N-(2,2,2-trifluoroethyl)-L-tyrosyl-, di-2-propenyl ester (9CI) (CA INDEX NAME)

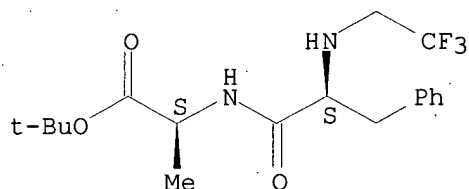
Absolute stereochemistry.



RN 374107-93-4 HCAPLUS

CN L-Alanine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

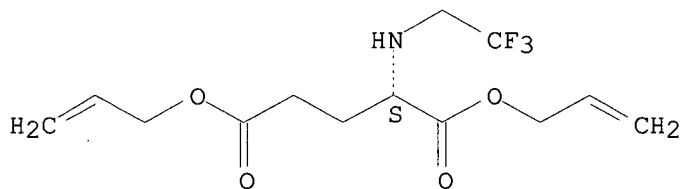
Absolute stereochemistry.



RN 374107-94-5 HCAPLUS

CN L-Glutamic acid, N-(2,2,2-trifluoroethyl)-, di-2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

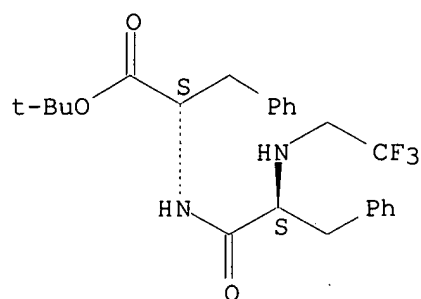


RN. 374107-95-6 HCAPLUS

CN L-Phenylalanine, N-(2,2,2-trifluoroethyl)-L-phenylalanyl-,

1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

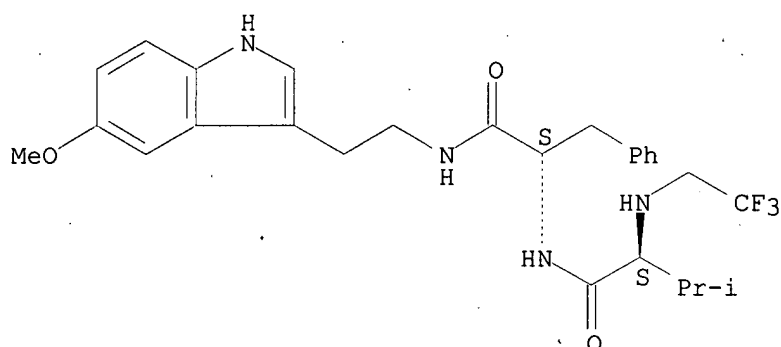
Absolute stereochemistry.



RN 374107-97-8 HCAPLUS

CN L-Phenylalaninamide, N-(2,2,2-trifluoroethyl)-L-valyl-N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)

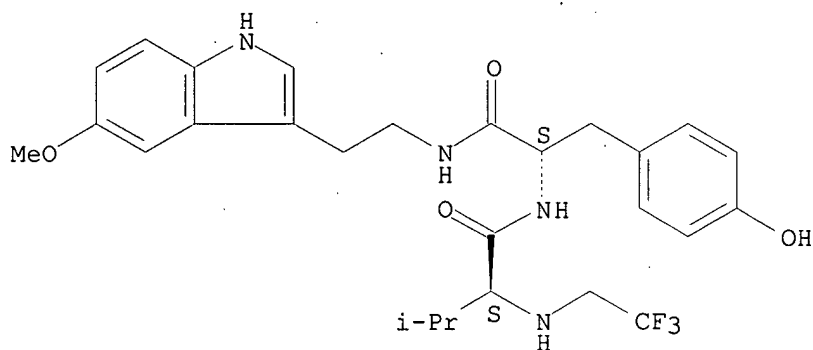
Absolute stereochemistry.



RN 374107-98-9 HCAPLUS

CN L-Tyrosinamide, N-(2,2,2-trifluoroethyl)-L-valyl-N-[2-(5-methoxy-1H-indol-3-yl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 71-43-2, Benzene, reactions 4070-48-8 7625-53-8  
10065-72-2 15100-75-1 16874-08-1

16874-17-2 18869-42-6 21691-50-9  
21705-13-5 22839-63-0 45172-25-6  
82113-65-3 100422-04-6 126456-43-7  
136030-00-7 271592-91-7 303049-62-9

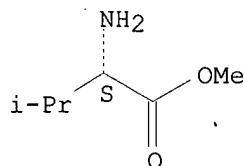
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of **perfluoroalkyl** amino acid derivs. as anticancer agents)

RN 71-43-2 HCAPLUS  
CN Benzene (8CI, 9CI) (CA INDEX NAME)

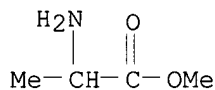


RN 4070-48-8 HCAPLUS  
CN L-Valine, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

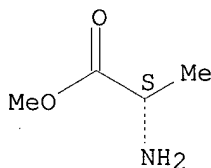


RN 7625-53-8 HCAPLUS  
CN Alanine, methyl ester (9CI) (CA INDEX NAME)



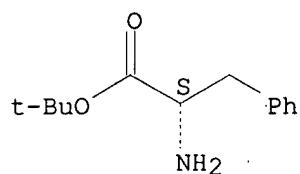
RN 10065-72-2 HCAPLUS  
CN L-Alanine, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 15100-75-1 HCAPLUS  
CN L-Phenylalanine, 1,1-dimethylethyl ester, hydrochloride (9CI) (CA INDEX NAME)

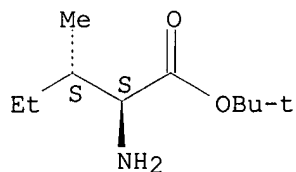
Absolute stereochemistry. Rotation (+).



● HCl

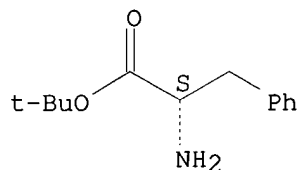
RN 16874-08-1 HCAPLUS  
CN L-Isoleucine, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

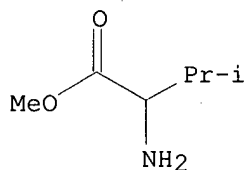


RN 16874-17-2 HCAPLUS  
CN L-Phenylalanine, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

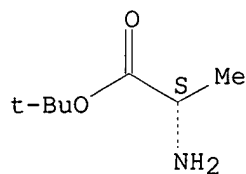


RN 18869-42-6 HCAPLUS  
CN Valine, methyl ester (9CI) (CA INDEX NAME)



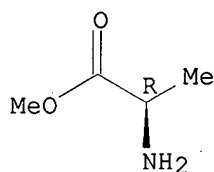
RN 21691-50-9 HCAPLUS  
CN L-Alanine, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



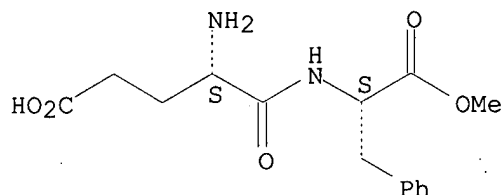
RN 21705-13-5 HCAPLUS  
 CN D-Alanine, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



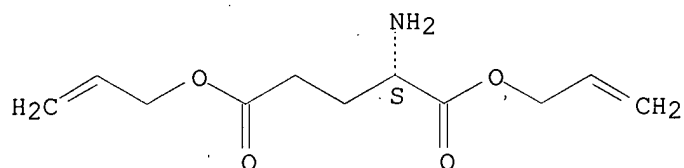
RN 22839-63-0 HCAPLUS  
 CN L-Phenylalanine, L-.alpha.-glutamyl-, 2-methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



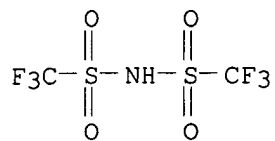
RN 45172-25-6 HCAPLUS  
 CN L-Glutamic acid, di-2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



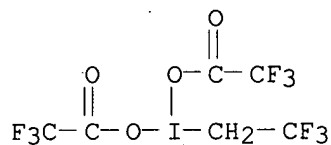
RN 82113-65-3 HCAPLUS  
 CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]- (9CI) (CA INDEX NAME)





RN 100422-04-6 HCAPLUS

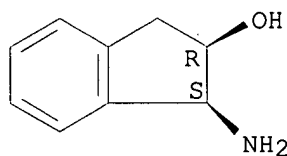
CN Iodine, bis(trifluoroacetato-.kappa.O)(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)



RN 126456-43-7 HCAPLUS

CN 1H-Inden-2-ol, 1-amino-2,3-dihydro-, (1S,2R)- (9CI) (CA INDEX NAME)

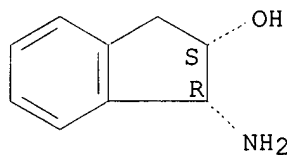
Absolute stereochemistry. Rotation (-).



RN 136030-00-7 HCAPLUS

CN 1H-Inden-2-ol, 1-amino-2,3-dihydro-, (1R,2S)- (9CI) (CA INDEX NAME)

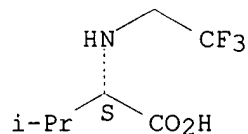
Absolute stereochemistry. Rotation (+).



RN 271592-91-7 HCAPLUS

CN L-Valine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

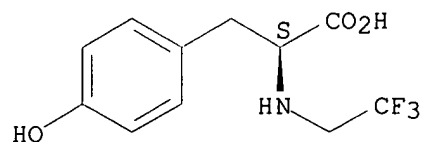
Absolute stereochemistry.



RN 303049-62-9 HCAPLUS

CN L-Tyrosine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 303049-61-8P 307501-98-0P

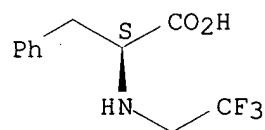
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of **perfluoroalkyl** amino acid derivs. as anticancer agents)

RN 303049-61-8 HCAPLUS

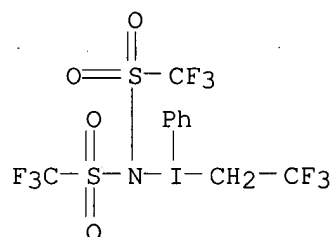
CN L-Phenylalanine, N-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 307501-98-0 HCAPLUS

CN Iodine, phenyl(2,2,2-trifluoroethyl)[1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamido-.kappa.N]- (9CI) (CA INDEX NAME)



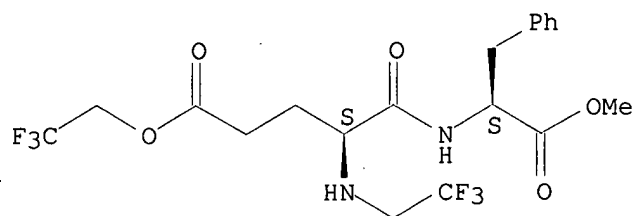
IT 374107-96-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of **perfluoroalkyl** amino acid derivs. as anticancer agents)

RN 374107-96-7 HCAPLUS

CN L-Phenylalanine, N-(2,2,2-trifluoroethyl)-L-.alpha.-glutamyl-, 2-methyl 1-(2,2,2-trifluoroethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L12 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:100304 HCAPLUS

DOCUMENT NUMBER: 123:9035

TITLE: 1-(Dichloroiodo)-1H,1H-Perfluoroalkanes

AUTHOR(S): Bravo, Pierfrancesco; Montanari, Vittorio; Resnati, Giuseppe; DesMarteau, Darryl D.

CORPORATE SOURCE: CSSON, CNR, Milan, 20131, Italy

SOURCE: Journal of Organic Chemistry (1994), 59(20), 6093-4  
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 123:9035

AB The prepn. of stable and cheap title chlorinating agents (by Cl transfer), RfCH2ICl2 (I; Rf = CF3, C2F5, C3F7, H(CF2)6), from the corresponding RfCH2I by direct chlorination; a similar reaction of RfI failed. I and CF3CO2Ag gives RfCH2I(O2CCF3)2. I are sol. in CH2Cl2 and insol. in CCl4 or CHCl3. The use of I as potential precursors of trivalent iodine compds. was discussed.

IT 94-02-0 110-83-8, Cyclohexene, reactions

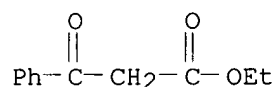
111-66-0, 1-Octene 126-81-8, Dimedone 326-06-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(chlorination with 1-(dichloroiodo)-1H,1H-perfluoroalkanes)

RN 94-02-0 HCAPLUS

CN Benzenepropanoic acid, .beta.-oxo-, ethyl ester (9CI) (CA INDEX NAME)



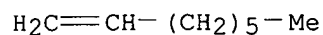
RN 110-83-8 HCAPLUS

CN Cyclohexene (8CI, 9CI) (CA INDEX NAME)

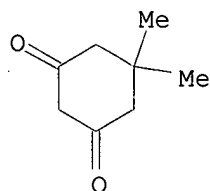


RN 111-66-0 HCAPLUS

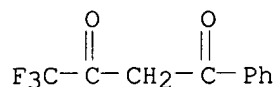
CN 1-Octene (8CI, 9CI) (CA INDEX NAME)



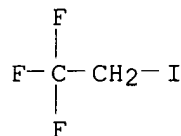
RN 126-81-8 HCAPLUS  
 CN 1,3-Cyclohexanedione, 5,5-dimethyl- (6CI, 8CI, 9CI) (CA INDEX NAME)



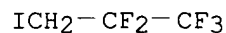
RN 326-06-7 HCAPLUS  
 CN 1,3-Butanedione, 4,4,4-trifluoro-1-phenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



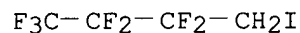
IT 353-83-3 354-69-8 374-98-1 376-32-9  
 7782-50-5, Dichlorine, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (conversion to 1-(dichloriodo)-1H,1H-perfluoroalkanes)  
 RN 353-83-3 HCAPLUS  
 CN Ethane, 1,1,1-trifluoro-2-iodo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



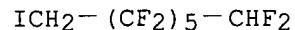
RN 354-69-8 HCAPLUS  
 CN Propane, 1,1,1,2,2-pentafluoro-3-iodo- (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 374-98-1 HCAPLUS  
 CN Butane, 1,1,1,2,2,3,3-heptafluoro-4-iodo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



RN 376-32-9 HCAPLUS  
 CN Heptane, 1,1,2,2,3,3,4,4,5,5,6,6-dodecafluoro-7-iodo- (6CI, 8CI, 9CI) (CA INDEX NAME)

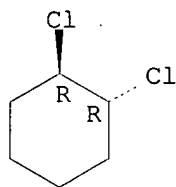


RN 7782-50-5 HCAPLUS  
 CN Chlorine (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

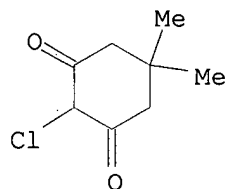
Cl-Cl

IT 822-86-6P, trans-1,2-Dichlorocyclohexane 7298-89-7P,  
 2-Chlorodimedone 21948-46-9P 41381-97-9P  
 163667-29-6P  
 RL: SPN (Synthetic preparation); PRÉP (Preparation)  
 (from chlorination with 1-(dichloriodo)-1H,1H-perfluoroalkanes)  
 RN 822-86-6 HCAPLUS  
 CN Cyclohexane, 1,2-dichloro-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

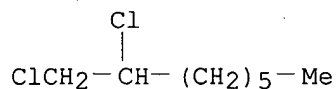
Relative stereochemistry.



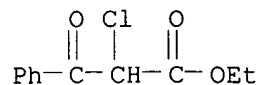
RN 7298-89-7 HCAPLUS  
 CN 1,3-Cyclohexanedione, 2-chloro-5,5-dimethyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



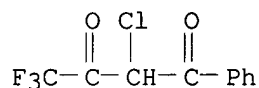
RN 21948-46-9 HCAPLUS  
 CN Octane, 1,2-dichloro- (6CI, 8CI, 9CI) (CA INDEX NAME)



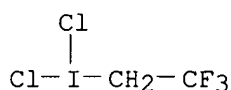
RN 41381-97-9 HCAPLUS  
 CN Benzenepropanoic acid, .alpha.-chloro-.beta.-oxo-, ethyl ester (9CI) (CA INDEX NAME)



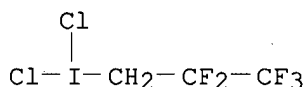
RN 163667-29-6 HCAPLUS  
 CN 1,3-Butanedione, 2-chloro-4,4,4-trifluoro-1-phenyl- (9CI) (CA INDEX NAME)



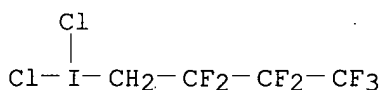
IT 159763-01-6P 163667-30-9P 163667-31-0P  
 163667-32-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (from direct chlorination of **dihydroperfluoroalkyl** iodides)  
 RN 159763-01-6 HCAPLUS  
 CN Iodine, dichloro(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)



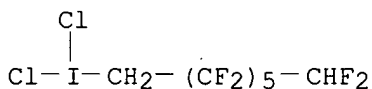
RN 163667-30-9 HCAPLUS  
 CN Iodine, dichloro(2,2,3,3,3-pentafluoropropyl)- (9CI) (CA INDEX NAME)



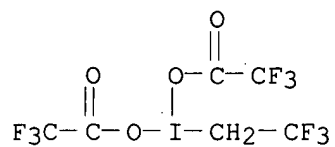
RN 163667-31-0 HCAPLUS  
 CN Iodine, dichloro(2,2,3,3,4,4,4-heptafluorobutyl)- (9CI) (CA INDEX NAME)



RN 163667-32-1 HCAPLUS  
 CN Iodine, dichloro(2,2,3,3,4,4,5,5,6,6,7,7-dodecafluoroheptyl)- (9CI) (CA INDEX NAME)



IT 100422-04-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (from ligand exchange with 1-(dichloriodo)-1H,1H-perfluoroalkanes)  
 RN 100422-04-6 HCAPLUS  
 CN Iodine, bis(trifluoroacetato- $\kappa$ O)(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)



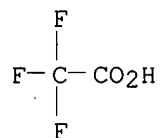
IT 2966-50-9, Silver trifluoroacetate

RL: RCT (Reactant); RACT (Reactant or reagent)

(ligand exchange with 1-(dichloroiodo)-1H,1H-perfluoroalkanes)

RN 2966-50-9 HCAPLUS

CN Acetic acid, trifluoro-, silver(1+) salt (8CI, 9CI) (CA INDEX NAME)



Ag(I)